

## RFP for Engineering Design Services for Structural Upgrade of Glendale Civic Center Parking Garage

### City of Glendale Responses to Proposer Questions

1. Is generation of 3-D model for the entire structure with all the utilities anticipated for model review?

Yes.

2. What information will be provided from Solar Panels Engineer? Is GWP working with a consultant for design of PV system? If yes, is there any contact information available?

We do not have a solar panels engineer. As the consultant for this project, you will be required to have a concept about what can be installed on this roof to provide maximum output for the City and figure out the load contribution from such a system and design the upgrade accordingly. You will be responsible for designing the steel structure supporting the solar panels (solar canopy). The design of the PV system will be part of a separate RFP. The design of the PV system will be based upon and will use the solar canopy design and structural upgrades proposed by the you.

3. Who will design the steel structure supporting the solar panels? If reactions are provided by the solar panels engineer, will the locations align with building column location? Who is responsible for the design of the anchorage of the canopy (steel structure supporting the solar panels to the parking structure)? Is there an approximate weight of the steel structure supporting the solar panels? Do the consultants need to design the PV system support system?

You must design the steel support structure and anchorage for the future solar PV system. The City will hire a separate contractor to build the structures and upgrade the parking structure per the specifications you develop under this RFP. The separate contractor will also design and build the solar PV system utilizing your design for the solar canopy. You may use industry standard solar panels to figure out the total mechanical load and moment impressed by the new system to design the canopy and to determine what upgrade is required for the parking structure.

4. Will there be equipment other than the solar panels such as inverter, batteries, and other equipment to be supported on the roof? If there is, who will be responsible for the design of equipment anchorage to roof?

We do not have a design for the solar PV system. Inverter, batteries etc. could be on the ground where the electric panels are located or may be on the roof. You are responsible for the design of the equipment anchorage to the roof. You need to design the system for the worst case loading scenario.

5. The proposal references current California Building Code in section 3, is this reference to California Existing Building Code edition 2019 or California Building Code (CBC 2019)?

The City of Glendale has adopted local amendments to the State Building Code per ordinance passed by the Glendale City Council, and the City of Glendale's 2020 Building and Safety Code applies to the project. The 2020 Glendale Building and Safety Code is available at [https://www.ci.glendale.ca.us/government/council\\_packets/CC\\_HA\\_111919/CC\\_7c\\_111919.pdf](https://www.ci.glendale.ca.us/government/council_packets/CC_HA_111919/CC_7c_111919.pdf)

6. Is a Geotechnical report available for the project site?

No.

7. Will the drawings and calculations for the precast beams, structural steel, foundations and columns of the existing structure be made available at the start of the project?

No. We have provided all available construction plans from 1982 and 1987. We do not have any additional drawings and calculations.

8. Shall Construction administration services be included in the proposal? If yes, what is the approximate anticipated duration of construction?

No. Construction administration services/project management is not in the scope of work for the subject RFP.

9. Since this project is for the City of Glendale, is submittal for a construction permit required? If no, which jurisdiction shall approve the construction documents?

Yes, a permit is required. The construction plans and designs will be reviewed and approved by the City's Building and Safety Department before issuing the permit.

10. Are design reviews and progress submittals required or scheduled during the design phase? If yes, at what stages of the design they will be scheduled?

Design reviews and progress submittals are desired, but the City had not specified specific time frames. Please include in your proposal the description of your project approach and your suggestions for the submittals and review periods.

11. How many design reviews are anticipated?

Please see previous response.

12. Is there going to be any third party review of deliverables?

There may be; however, the consultant will be the Responsible Engineer of Record.

13. Is the consultant the "Responsible Engineer of Record" for signing and sealing all the documents specifically calculations, drawings and specifications?

Yes.

14. Should the cost of testing of in situ concrete be included in the proposal?

Yes.

15. Please clarify whether hand-delivery of the proposal hardcopies is possible.

Hand delivery of hardcopy proposals may be possible, but it is the responsibility of the proposer to ensure that the proposal is timely delivered. As of the date of this Addendum, GWP offices are open by appointment only. If you would like to hand-deliver your proposal, please contact Bryan Salazar at [bsalazar@glendaleca.gov](mailto:bsalazar@glendaleca.gov) or (818) 254-6863.

16. Will the consultant be requested to provide "Owner's Field Engineer" to be assigned to the site to resolve RFIs, attend field meetings and resolve discrepancies?

The selected consultant may be required to answer questions, resolve discrepancies if any, on the design during the construction phase. But managing the project is not part of your scope of work.

17. Are we supposed to do "as-built" drawings after construction?

No. As-built drawings will be the responsibility of the construction contractor.

18. Who will be responsible for doing the QA/QC for special inspection? Will there be third party inspector?

Project management/construction inspection will be by a third party to avoid any potential conflicts of interest.

19. Are we supposed to do final cost estimate breakdown?

Yes.

20. Are we expected to prepare general arrangement drawing and complete drawings for civil, architectural, structural and electrical drawings with supporting calculations and specifications?

Yes.

21. Who is responsible for generating concrete and steel fabrication drawings for the modifications?

This will be part of your scope of work under this RFP.

22. Is the design of the structural support system for the solar canopy included in the current RFP Scope?

Yes.

23. From the RFP it appears that the scope is limited to upgrading the existing concrete structure to receive the solar canopy in the future?

The consultant must prepare the design for the steel canopy and also for the structural upgrade of the parking structure. The consultant is required to complete the design, specifications, cost estimate etc. so that the City can hire a contractor to complete the installation.

24. Is there any ground-mount solar PV solar equipment?

All panels will be on the roof. But inverters, batteries etc. may be on the ground.

25. Is there any ground improvement requirement for accessibility which generate civil drawing including ADA requirement and roadway improvement?

This is not anticipated, but may be required depending upon what modifications are made to the structure.

26. Can we obtain existing topo survey?

We do not have one.

27. Does the City want to bring the parking structure to the current code (CBC 2019)? Per the CBC a full retrofit of the structure can be avoided if the added load does not significantly affect the load demand on the existing structure.

Please note that this project will be governed by the 2020 Glendale Building & Safety Code. See Response # 5. GWP is not necessarily looking to bring the parking structure up to current code if not required; but the City desires to ensure the structure is safe. If structural upgrades and seismic improvements are warranted to accomplish this, this should be included.

28. There are significant amounts of deferred maintenance items on the parking structure. Does the City want the consultant to include the assessment of the parking structure for deferred maintenance items and provide recommendations for repairs/enhance the life of the structure over the long term in the report or a feasibility of adding the mechanical loads only on the roof of the parking structure?

Yes, please provide a quote in your proposal for the assessment and recommendations for repairs/ enhancement of the life of the structure. You may propose actions for enhancing the life of the structure with detailed cost information. If such actions are required to enable the addition of the mechanical load on the structure, it becomes an integral part of the design and must be included. If the suggested repairs/ maintenance are not necessary to enable the

addition of the PV system, we would like for this work to be proposed and included as an option so that we can evaluate it as such.

29. From a quick preliminary review of the proposed panel layout, we believe that proposed panel layout may not be the most efficient for the parking structure. Would the City consider the consultants including preliminary/final design for the structural framing of the proposed solar canopy system.

Yes. Design of the structural canopy is part of your scope of work, and the City is flexible on the panel layout. What we have provided is only a conceptual plan and the City's goal is to install a solar system that produces the maximum output.

30. Please clarify your request for the consultant to specify "location of relevant staff and percentage they are expected to be physically working in Glendale."

As part of your scope of work, you may need to conduct inspections or testing at the parking structure or otherwise be on site. Most if not all meetings with City staff can be handled virtually. Additionally, you may be required to answer questions on the design or resolve discrepancies etc. during construction on an as-needed basis. The location of your staff and anticipated time in Glendale informs our understanding of potential travel costs and the scheduling of onsite meetings if required.

31. Are there drawings that provide precast column and rebar sizes and details?

No. All available drawings have been provided.

32. If not, is the City open to the use of non-destructive testing in the form of ground penetrating radar systems to determine rebar size and layout, and destructive testing in the form of testing core samples to determine concrete strength?

The City is okay with destructive and non-destructive testing as described.

33. Does the scope of this study include the impact of the electrical system on the parking structure, such as electrical room upsizing, panel board, inverter and conduit for the top deck?

Electrical system impact is not part of this RFP.

34. Is a visual condition assessment part of this scope, or is a report available if one has already been performed? Has any visible distress or signs of distress (cracking, spalling, discoloration, etc.) been observed to date that has not been repaired?

Yes, a visual condition assessment is part of your scope of work. The City has previously conducted a preliminary engineering study, and this preliminary study is included with this Addendum and Q&A for background only. Proposers are cautioned that the City does not warrant the conclusions contained within it, and the study may not be relied upon by proposers or the selected consultant. The selected consultant is expected to perform their own assessment, reach their own conclusions regarding the condition of the parking structure, and make their own, independent recommendations.

35. "Determine the allowable mechanical load that can be added on the roof of the structure after the upgrades are completed." Does this mechanical load refer to the load that can be added to the roof before the PV panels are installed?

This mechanical load includes the total load from the PV system including solar panels and associated equipment as well as the structural canopy that holds them. Your proposed design for the upgrade shall make the structure safe to take on this additional load.

36. The structural information, reinforcing steel size & layout, of the pre-cast concrete elements is not indicated on the provided structural plans. This information is typically provided on the precast concrete shop drawings. Will this information be provided?  
All available information has been provided. Any additional information needed must be collected from the field.
37. Does the “mechanical load assessment” scope of work refer to the weight of the required equipment in addition to the PV weight? Or does it refer to additional electrical/power load that needs to be supplied to the garage?  
Mechanical load assessment should capture all the mechanical load impressed on the structure which include the structures holding the panels, the panels and any accessories. Mechanical load does not include electrical load.
38. With regard to the insurance requirements, could you please clarify what is meant by ‘practice specific’ coverage? Is this the same as ‘project specific’ coverage?  
Generally, a project specific insurance policy covers a specific project. A practice specific insurance policy covers all of the insured’s projects within the scope of their insuring agreement over the policy term.
39. Page 6 of the RFP indicates that the parking structure shall be upgraded to current California Building Code. Please confirm that the intention of the City is to upgrade the existing parking structure to meet the seismic criteria for New Buildings based on 2019 California Building Code or is it acceptable to use the seismic evaluation/retrofit criteria for existing building per the American Society of Civil Engineers ASCE41-17 - Standard for Seismic Evaluation and Retrofit of Existing Buildings?  
The City of Glendale has adopted the State Building Code with local amendments per ordinance passed by the Glendale City Council, and the City of Glendale’s Building Ordinance applies to the project. See response # 5. With respect to ASCE41-17, Glendale’s Building Code does have a section that allows engineers to request to use any recognized standard. If you, as the engineer, believe that the use of the ASCE41-17 criteria is appropriate and meet the intent of the code, you may work with the Glendale Building Official to seek a modification to use it.
40. If the use of ASCE 41-17 for the evaluation/retrofit of the existing parking structure is acceptable, please confirm that the following Structural Performance Objectives are to be used: a) Life Safety Structural Performance at Basic Earthquake Level 1E (BSE-1E); 20% probability of exceedance in 50 years, and b) Collapse Prevention Structural Performance at Basic Earthquake Level 2E (BSE-2E); 5% probability of exceedance in 50 years.  
For purposes of providing a proposal, the above assumptions and objectives may be used, but have not been verified by the City.
41. On the East side of the building, there is an existing pedestrian bridge connecting to an adjacent building. Can the structural drawings for the pedestrian bridge be provided?  
We do not have any additional drawings to provide.
42. The RFP mentions the building suffered significant damage in the 1994 Northridge earthquake and substantial repairs were done after that. However, the RFP also states that the City does not have documentation regarding the repair work done after the 1994 Northridge earthquake. Are there any records (reports) to indicate the type of damages caused by Northridge earthquake? Are there any records to indicate the type of repairs performed after the earthquake? For instance, were any new structural elements (such as new shear walls) added to the structure?  
We have not located any such records.

43. Were there any condition assessments or seismic evaluations of the parking structure performed in the past (especially in the last 10-15 years)? If yes, can we get a copy of the reports/documents produced?

The City is unaware of any seismic evaluations of the parking structure. A preliminary engineering study was performed and this study is provided to all proposers for reference. However, proposers are expected to conduct their own independent evaluation. See response # 34.

44. Would GWP consider providing an extension to the above referenced RFP response?

Per Addendum # 1, the response deadline has been extended to October 30, 2020 at 3pm.

45. Is the Electrical Design of the PV System part of the scope of the proposal?

No.

46. Per the Conceptual Plan of the PV System, it looks like the PV is to be supported by an elevated structural over the parking deck, please confirm.

Yes.

47. In the second bullet in Scope of Work, "upgrade the parking structure to current California Building Code, to complete necessary repairs such that the parking structure can accommodate the new solar PV system". Since the addition of the PV System may or may not trigger a seismic retrofit of the building, should our proposal include the fee for seismic retrofit assuming that it will be required?

Yes, please include seismic retrofit in your proposal as a separate line item.

48. We assume the design of the anchorage from the canopy to the supporting structure, the canopy structure, and the canopy support of the solar panels will be provided by the solar panel supplier. Please confirm.

All of this is part of your Scope of Work.

49. Under Appendix C "Structural Engineer Review," the deliverable is noted as a Structural Report. In the "Technical Specifications," the deliverable includes Construction Documents. In addition, under "Deliverables," "repairs" are noted for the technical plans to be submitted. As it relates to the deliverables, we would like to clarify the expected scope of work as follows:

- a. **Repair:** We understand damage was experienced under the Northridge earthquake. Is the city requesting repair for preexisting damage (evaluate previous repair and upgrade to 2019 CEBC standards for basic earthquake safety performance of existing buildings), or is the term repair related solely to remediation due to the solar panel installation (i.e., waterproofing)?

You are responsible for ensuring the building is structurally sound, including specifying any repair work needed, such that it can support the solar panel installation and meets basic safety objectives. Deferred maintenance and visible signs of distress are evident. Additional repairs and maintenance which are not necessary to support the solar system load, but which are recommended, should be evaluated and the cost of this work be included as a separate line item so that the City can consider this work as an option. Seismic evaluation should also be included and quoted as an option. Please note that the 2020 Glendale Building & Safety Code applies; see response to Question # 5.

- b. **Structural Upgrade:** We understand the building was built using 1982 CBC requirements; is the intent to upgrade the existing building seismic performance to basic safety objectives regardless of whether a mandatory seismic upgrade is triggered by the CEBC (see "Triggered Seismic Upgrade" below).

Yes. The City wants to ensure the building is safe.

- c. **Triggered Seismic Upgrade:** The building code (CEBC) allows for minor weight and mass additions to an existing structure without having to upgrade the structure to current building code (CBC) prescriptive demands. Please confirm whether evaluation and strengthening design of the structure is only requested if the code minimum thresholds are exceeded.

Please see previous responses.

50. Does the city have a construction budget and schedule in mind?

No. The City will consider your price and schedule for your work as part of the evaluation.

51. In the context of deliverables, please confirm “engineering estimate” consists of a cost estimate of the proposed structural strengthening or if there is another definition in mind for “engineering estimate.” The City is looking for an itemized engineering estimate for all of the work, and that would be sufficient for the City to bid the work and hire a contractor.

52. Who is performing the Mechanical/Electrical services for the solar panel system? Will this scope be a separate agreement with the city, or is the intent to include MEP services related to the solar panel installation in the scope related to this RFP?

This will be performed by a separate contractor under a separate contract in the future.

53. We assume the solar panels are not going to disturb minimum spacing for parking spaces and therefore do not require a parking space assessment. Please confirm if otherwise, or if a parking space assessment is required.

If the structural canopy does not disturb parking spaces, then no parking space assessment will be required. Our desire is that the design not eliminate parking spaces.